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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

MAT-8260US1

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on November 16, 2005

Signature

Typed or printed name Beth Johnson

Application Number

10/660,054

Filed

September 11, 2008

First Named Inventor

S. YAMANE et al.

Art Unit

1774

Examiner

Merrick L. Dixon

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s)

Note: No more than five (5) pages may be provided.

I am the

- ☐ applicant/inventor.
- ☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒ attorney or agent of record. 34,515
Registration number

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34

Signature

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Telephone number

Date

NOVEMBER 16, 2005

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: 10/660,054
Applicant: Shigeru YAMANE et al.
Filed: September 11, 2003
Title: METHOD OF MANUFACTURING CLAD BOARD FOR FORMING CIRCUITRY,
CLAD BOARD, AND CORE BOARD FOR CLAD BOARD
TC/A.U.: 1774
Examiner: Merrick L. Dixon
Confirmation No.: 7291
Docket No.: MAT-8260US1

Reasons for Requested Review

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The pending claims are 37, 40, 41, 44, 59, 66, 69, 70, 73, and 76.

Paragraph 2 of the final rejection dated July 14, 2005 rejected claims 37, 40, 41, 44, 47, 59, 66 and 76 under 35 U.S.C. § 102(b) as anticipated by Nakatani (U.S. Patent No. 6,096,411). Paragraph 4 of the final rejection rejected claims 66, 69, 70, 73 and 76 under 35 U.S.C. § 103(a) as unpatentable over Nakatani.

During a telephone interview with the Examiner on November 10, 2005, the Examiner agreed that applicants could treat the rejection of claims 37, 40, 41, 44, 47, 59, 66, and 76 as a rejection under 35 U.S.C. § 103(a) instead of a rejection under 35 U.S.C. § 102(b). An interview summary was filed with the USPTO on November 11, 2005. Accordingly, all of the claims have been rejected under 35 U.S.C. § 103(a) as unpatentable over Nakatani.

Claim 37 recites, in part:

resin material impregnated into the fiber sheet, the resin material including at least one of thermoplastic resin and thermosetting resin having semi-cured portion; and

a resin layer formed smoothly on the fiber sheet, the resin layer being made of material identical to the resin material.

Claim 66 recites, in part:

resin material impregnated into the fiber sheet, the resin material including at least one of thermoplastic resin and thermosetting resin having semi-cured portion; and

a resin layer formed on the fiber sheet, being made of material identical to the resin material.

Figures 1 and 2 of Nakatani, for example, shows a double-sided wire board 6 composed of a laminated material substrate 1, copper foils 4 (also shown as copper foils 41a, 42a), and via holes 13 with conductive paste 30. (col. 8, lines 1-41). Figures 3A and 3B illustrate a multi-layered printed board 61 that is formed by repeatedly using the features shown in Figures 1 and 2. (col. 8, lines 56-59). Figure 3A shows prepregs 10, 10, with through holes 13 filled with conductive paste. On both sides of the core board are copper foils 4, 4. When the prepregs and a base material are heated and pressed with the copper foils, a multi-layered printed board 61 is formed with electrodes 41b, 42b connected through the inner via hole conductors 3. By etching the copper foils 43, 44 on the upper and lower sides into electrodes of a desired pattern, there is a completed multi-layered printed circuit board 61. (col. 8, line 56-col. 9, line 5)

Thus, Nakatani discloses wire board 6 with copper foils 4, 4:

4—	Copper Foil
6—	Wire Board
4—	Copper Foil

Paragraph 5, on page 3 of the Office Action contends that it would have been obvious to substitute resin material for the copper foils disclosed in Nakatani. Applicants respectfully disagree.

In Nakatani, copper foils 4, 4 serve as electrodes to provide electric connection. (col. 8, lines 45-47). That is, the Nakatani device must have copper foils 4, 4 in order to function. If resin layers are substituted for the copper foils in Nakatani, the Nakatani device would no longer function as a printed circuit board. Therefore, it would not have been obvious to one skilled in the art to substitute resin material for the copper foils in the Nakatani device. *In re Fritch*, 23 USPQ2d 1780 at n.12 (Fed. Cir. 1992) (a proposed modification to a prior art reference cannot be used to reject claims if the proposed modification would render the prior art device inoperable for its intended purpose); *In re Gordon*, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (a prior art reference teaches away from the USPTO's proposed modification if the proposed modification would render the prior art device inoperable for its intended purpose).

For the above reasons, all pending claims are in condition for allowance and should be allowed.